

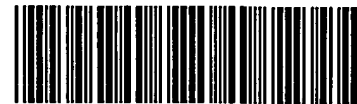
## RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/673,671A  
Source: 1FW16  
Date Processed by STIC: 3/16/07

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 03/16/2007

PATENT APPLICATION: US/10/673,671A

TIME: 12:31:23

Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set : N:\CRF4\03162007\J673671A.raw

3 <110> APPLICANT: Sastry, K. Jagannadha  
 4     Arlinghaus, Ralph B.  
 5     Nehete, Pramod N.  
 7 <120> TITLE OF INVENTION: HIV-SPECIFIC T-CELL INDUCTION  
 9 <130> FILE REFERENCE: UTXC:561USC1  
 11 <140> CURRENT APPLICATION NUMBER: 10/673,671A  
 C--> 12 <141> CURRENT FILING DATE: 2003-09-29  
 14 <150> PRIOR APPLICATION NUMBER: 60/115,175  
 15 <151> PRIOR FILING DATE: 1999-01-08  
 17 <150> PRIOR APPLICATION NUMBER: 60/108,563  
 18 <151> PRIOR FILING DATE: 1998-11-16  
 20 <160> NUMBER OF SEQ ID NOS: 42  
 22 <170> SOFTWARE: PatentIn Ver. 2.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 11  
 26 <212> TYPE: PRT  
 27 <213> ORGANISM: Human immunodeficiency virus type 1  
 29 <400> SEQUENCE: 1  
 30 Val Tyr Tyr Gly Val Pro Val Trp Lys Glu Ala  
 31    1                   5                   10  
 34 <210> SEQ ID NO: 2  
 35 <211> LENGTH: 11  
 36 <212> TYPE: PRT  
 37 <213> ORGANISM: Human immunodeficiency virus type 1  
 39 <400> SEQUENCE: 2  
 40 Val Tyr Tyr Gly Val Pro Val Trp Lys Asp Ala  
 41    1                   5                   10  
 44 <210> SEQ ID NO: 3  
 45 <211> LENGTH: 11  
 46 <212> TYPE: PRT  
 47 <213> ORGANISM: Human immunodeficiency virus type 1  
 49 <400> SEQUENCE: 3  
 50 Val Tyr Ser Gly Val Pro Val Trp Glu Asp Ala  
 51    1                   5                   10  
 54 <210> SEQ ID NO: 4  
 55 <211> LENGTH: 12  
 56 <212> TYPE: PRT  
 57 <213> ORGANISM: Human immunodeficiency virus type 1  
 59 <400> SEQUENCE: 4  
 60 Leu Trp Asp Gln Ser Leu Lys Pro Cys Lys Leu Thr  
 61    1                   5                   10  
 64 <210> SEQ ID NO: 5  
 65 <211> LENGTH: 13

*see p. 6*

## RAW SEQUENCE LISTING

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Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set: N:\CRF4\03162007\J673671A.raw

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66 <212> TYPE: PRT
67 <213> ORGANISM: Human immunodeficiency virus type 1
69 <400> SEQUENCE: 5
70 Leu Trp Asp Glu Ser Leu Lys Pro Cys Val Lys Leu Thr
71 1 5 10
74 <210> SEQ ID NO: 6
75 <211> LENGTH: 13
76 <212> TYPE: PRT
77 <213> ORGANISM: Human immunodeficiency virus type 1
79 <400> SEQUENCE: 6
80 Leu Trp Asp Gln Ser Leu Lys Pro Cys Val Gln Met Thr
81 1 5 10
84 <210> SEQ ID NO: 7
85 <211> LENGTH: 13
86 <212> TYPE: PRT
87 <213> ORGANISM: Human immunodeficiency virus type 1
89 <220> FEATURE:
90 <221> NAME/KEY: UNSURE
91 <222> LOCATION: (4)
92 <223> OTHER INFORMATION: X = any
94 <400> SEQUENCE: 7
W--> 95 Leu Trp Asp Xaa Ser Leu Lys Pro Cys Val Lys Leu Thr
96 1 5 10
99 <210> SEQ ID NO: 8
100 <211> LENGTH: 13
101 <212> TYPE: PRT
102 <213> ORGANISM: Human immunodeficiency virus type 1
104 <400> SEQUENCE: 8
105 Ser Val Ile Thr Gln Ala Cys Ser Lys Val Ser Phe Glu
106 1 5 10
109 <210> SEQ ID NO: 9
110 <211> LENGTH: 13
111 <212> TYPE: PRT
112 <213> ORGANISM: Human immunodeficiency virus type 1
114 <400> SEQUENCE: 9
115 Ser Ala Ile Thr Gln Ala Cys Ser Lys Val Ser Phe Glu
116 1 5 10
119 <210> SEQ ID NO: 10
120 <211> LENGTH: 13
121 <212> TYPE: PRT
122 <213> ORGANISM: Human immunodeficiency virus type 1
124 <400> SEQUENCE: 10
125 Ser Ala Ile Thr Gln Ala Cys Ser Lys Val Ser Phe Asp
126 1 5 10
129 <210> SEQ ID NO: 11
130 <211> LENGTH: 13
131 <212> TYPE: PRT
132 <213> ORGANISM: Human immunodeficiency virus type 1
134 <400> SEQUENCE: 11

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Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set: N:\CRF4\03162007\J673671A.raw

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135 Ser Val Ile Lys Gln Ala Cys Ser Lys Ile Ser Phe Asp
136   1           5           10
139 <210> SEQ ID NO: 12
140 <211> LENGTH: 13
141 <212> TYPE: PRT
142 <213> ORGANISM: Human immunodeficiency virus type 1
144 <400> SEQUENCE: 12
145 Ser Thr Ile Thr Gln Ala Cys Ser Lys Val Ser Trp Asp
146   1           5           10
149 <210> SEQ ID NO: 13
150 <211> LENGTH: 13
151 <212> TYPE: PRT
152 <213> ORGANISM: Human immunodeficiency virus type 1
154 <400> SEQUENCE: 13
155 Ser Thr Ile Lys Gln Ala Cys Ser Lys Val Asn Phe Asp
156   1           5           10
159 <210> SEQ ID NO: 14
160 <211> LENGTH: 13
161 <212> TYPE: PRT
162 <213> ORGANISM: Human immunodeficiency virus type 1
164 <220> FEATURE:
165 <221> NAME/KEY: UNSURE
166 <222> LOCATION: (4)
167 <223> OTHER INFORMATION: X = any
169 <400> SEQUENCE: 14
W--> 170 Thr Thr Ile Xaa Gln Ala Cys Ser Lys Val Ser Phe Glu
171   1           5           10
174 <210> SEQ ID NO: 15
175 <211> LENGTH: 13
176 <212> TYPE: PRT
177 <213> ORGANISM: Human immunodeficiency virus type 1
179 <220> FEATURE:
180 <221> NAME/KEY: UNSURE
181 <222> LOCATION: (2)
182 <223> OTHER INFORMATION: X = any
184 <400> SEQUENCE: 15
W--> 185 Ser Xaa Ile Lys Gln Ala Cys Ser Lys Val Ser Phe Glu
186   1           5           10
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190 <211> LENGTH: 13
191 <212> TYPE: PRT
192 <213> ORGANISM: Human immunodeficiency virus type 1
194 <400> SEQUENCE: 16
195 Gly Thr Gly Pro Cys Thr Asn Val Ser Thr Val Gln Cys
196   1           5           10
199 <210> SEQ ID NO: 17
200 <211> LENGTH: 13
201 <212> TYPE: PRT
202 <213> ORGANISM: Human immunodeficiency virus type 1

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Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set: N:\CRF4\03162007\J673671A.raw

204 <400> SEQUENCE: 17  
 205 Gly Thr Gly Pro Cys Lys Asn Val Ser Thr Val Gln Cys  
 206 1 5 10  
 209 <210> SEQ ID NO: 18  
 210 <211> LENGTH: 13  
 211 <212> TYPE: PRT  
 212 <213> ORGANISM: Human immunodeficiency virus type 1  
 214 <400> SEQUENCE: 18  
 215 Gly Thr Gly Pro Cys His Asn Val Ser Thr Val Gln Cys  
 216 1 5 10  
 219 <210> SEQ ID NO: 19  
 220 <211> LENGTH: 13  
 221 <212> TYPE: PRT  
 222 <213> ORGANISM: Human immunodeficiency virus type 1  
 224 <220> FEATURE:  
 225 <221> NAME/KEY: UNSURE  
 226 <222> LOCATION: (6)  
 227 <223> OTHER INFORMATION: X = any  
 229 <400> SEQUENCE: 19  
 W--> 230 Gly Thr Gly Leu Cys Xaa Asn Ile Thr Val Val Thr Cys  
 231 1 5 10  
 234 <210> SEQ ID NO: 20  
 235 <211> LENGTH: 25  
 236 <212> TYPE: PRT  
 237 <213> ORGANISM: Human immunodeficiency virus type 1  
 239 <400> SEQUENCE: 20  
 240 Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser  
 241 1 5 10 15  
 243 Leu Thr Leu Thr Val Gln Ala Arg Gln  
 244 20 25  
 247 <210> SEQ ID NO: 21  
 248 <211> LENGTH: 25  
 249 <212> TYPE: PRT  
 250 <213> ORGANISM: Human immunodeficiency virus type 1  
 252 <400> SEQUENCE: 21  
 253 Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser  
 254 1 5 10 15  
 256 Ile Thr Leu Thr Val Gln Ala Arg Gln  
 257 20 25  
 260 <210> SEQ ID NO: 22  
 261 <211> LENGTH: 25  
 262 <212> TYPE: PRT  
 263 <213> ORGANISM: Human immunodeficiency virus type 1  
 265 <220> FEATURE:  
 266 <221> NAME/KEY: UNSURE  
 267 <222> LOCATION: (17)  
 268 <223> OTHER INFORMATION: X = any  
 270 <400> SEQUENCE: 22  
 271 Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser

## RAW SEQUENCE LISTING

DATE: 03/16/2007

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Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set: N:\CRF4\03162007\J673671A.raw

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272      1              5              10              15
W--> 274 Xaa Thr Leu Thr Val Gln Ala Arg Gln
275              20              25
278 <210> SEQ ID NO: 23
279 <211> LENGTH: 25
280 <212> TYPE: PRT
281 <213> ORGANISM: Human immunodeficiency virus type 1
283 <400> SEQUENCE: 23
284 Ile Phe Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser
285      1              5              10              15
287 Leu Thr Leu Thr Val Gln Ala Arg Gln
288              20              25
291 <210> SEQ ID NO: 24
292 <211> LENGTH: 25
293 <212> TYPE: PRT
294 <213> ORGANISM: Human immunodeficiency virus type 1
296 <400> SEQUENCE: 24
297 Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ala
298      1              5              10              15
300 Thr Ala Leu Thr Val Gln Ala Arg Gln
301              20              25
304 <210> SEQ ID NO: 25
305 <211> LENGTH: 25
306 <212> TYPE: PRT
307 <213> ORGANISM: Human immunodeficiency virus type 1
309 <220> FEATURE:
310 <221> NAME/KEY: UNSURE
311 <222> LOCATION: (17)..(18)
312 <223> OTHER INFORMATION: X = any
314 <400> SEQUENCE: 25
315 Phe Leu Gly Phe Leu Gly Ala Ala Gly Ser Thr Met Gly Ala Ala Ser
316      1              5              10              15
W--> 318 Xaa Xaa Leu Thr Val Gln Ala Arg Gln
319              20              25
322 <210> SEQ ID NO: 26
323 <211> LENGTH: 12
324 <212> TYPE: PRT
325 <213> ORGANISM: Human immunodeficiency virus type 1
327 <400> SEQUENCE: 26
328 Tyr Leu Arg Asp Gln Gln Leu Leu Gly Ile Trp Gly
329      1              5              10
332 <210> SEQ ID NO: 27
333 <211> LENGTH: 12
334 <212> TYPE: PRT
335 <213> ORGANISM: Human immunodeficiency virus type 1
337 <400> SEQUENCE: 27
338 Tyr Leu Lys Asp Gln Gln Leu Leu Gly Ile Trp Gly
339      1              5              10
342 <210> SEQ ID NO: 28

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/673,671A

DATE: 03/16/2007  
TIME: 12:31:24

FYI

Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt  
Output Set: N:\CRF4\03162007\J673671A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; Xaa Pos. 4  
Seq#:14; Xaa Pos. 4  
Seq#:15; Xaa Pos. 2  
Seq#:19; Xaa Pos. 6  
Seq#:22; Xaa Pos. 17  
Seq#:25; Xaa Pos. 17,18  
Seq#:29; Xaa Pos. 3  
Seq#:30; Xaa Pos. 3

## VERIFICATION SUMMARY

DATE: 03/16/2007

PATENT APPLICATION: US/10/673,671A

TIME: 12:31:24

Input Set : N:\efs\03\_16\_07\10673671a\_efs\UTXC561USC1.txt

Output Set: N:\CRF4\03162007\J673671A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:95 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:16  
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16  
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0